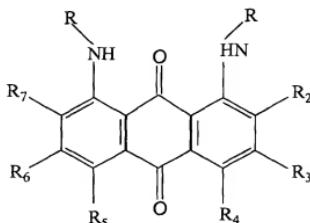


What is claimed is:

1. A colored polymeric resin composition, comprising:

a polymeric resin; and

a 1,8-anthraquinone derivative having a purity of greater than or equal to about 90 wt% and having a Formula (VIII):



(VIII)

wherein R₂ - R₇ are, individually, selected from the group consisting of a hydrogen atom, a hydroxyl group, an alkoxy group, an aryloxy group, an aliphatic group, an aromatic group, a heterocyclic group, a halogen atom, a cyano group, a nitro group, --COR₉, --COOR₉, --NR₉R₁₀, --NR₁₀COR₁₁, --NR₁₀SO₂R₁₁, --CONR₉R₁₀, --CONHSO₂R₁₁, and --SO₂NHCOR₁₁; in which R₉ and R₁₀ are, individually, selected from the group consisting of a hydrogen atom, an aliphatic group, an aromatic group, and a heterocyclic group; wherein R₁₁ is selected from the group consisting of an aliphatic group, an aromatic group, and a heterocyclic group; and wherein R is selected from the group consisting of hydrogen, an alkyl group containing 1 to 20 carbon atoms, a cycloalkyl group containing 3 to 20 carbon atoms, an allyl group containing 3 to 20 carbon atoms, a hydroxyl group, a 5-membered heterocyclic ring, and a 6-membered heterocyclic ring.

2. The composition of Claim 1, wherein the 1,8-anthaquinone derivative has a heat stability of about 600°F (315°C), a maximum absorption located between about 530 and 610 nm, an extinction coefficient at 650 nm of less than or equal to about 1,000 mol⁻¹·cm⁻¹·L (measured in CH₂Cl₂ solution), a minimum extinction coefficient at 600 nm greater than or equal to about 1,500 mol⁻¹·cm⁻¹·L.

3. The composition of Claim 1, wherein the 1,8-anthaquinone derivative has a light transmission of greater than or equal to about 70% at 650 nm, a curing index of greater than or equal to about 0.1 and a filtration index of greater than or equal to about 2.5, and a ratio of extinction coefficient at 650 nm to 600 nm less than about 0.1.

4. The composition of Claim 1, wherein the 1,8-anthaquinone derivative has an absorbance ratio at 600 nm to 365 nm of greater than or equal to about 2.

5. The composition of Claim 4, wherein the absorbance ratio at 600 nm to 365 nm is greater than or equal to about 5.

6. The composition of Claim 1, wherein the absorbance ratio at 600 nm to 365 nm is greater than or equal to about 10.

7. The composition of Claim 1, wherein the polymeric resin comprises polycarbonate.

8. The composition of Claim 1, wherein the 1,8-anthaquinone derivative is present in an amount of about 0.01 wt% to about 5 wt%, based upon the total weight of the composition.

9. The composition of Claim 1, wherein the 1,8-anthaquinone derivative is present in an amount of about 0.01 wt% to about 1 wt%, based upon the total weight of the composition.

10. The composition of Claim 1, wherein the 1,8-anthaquinone derivative has a filtration index greater than or equal to about 4.0.

11. The composition of Claim 10, wherein the filtration index is greater than or equal to about 6.

12. The composition of Claim 1, wherein the 1,8-anthaquinone derivative has a curing index greater than or equal to about 0.5.

13. The composition of Claim 12, wherein the curing index is greater than or equal to about 5.

14. The composition of Claim 1, wherein the 1,8-anthaquinone derivative comprises 1,8 bis(cyclohexylamino) anthraquinone.

15. The composition of Claim 1, wherein the 1,8-anthaquinone derivative comprises 1,8-dialkylamino anthraquinone.

16. The composition of Claim 15, wherein 1,8-anthaquinone derivative is present in an amount of about 0.1 wt% to about 0.4 wt%, based upon the total weight of the composition.

17. The composition of Claim 1, wherein the 1,8-anthaquinone derivative has a ratio of extinction coefficient at 650 nm to the maximum extinction coefficient of less than or equal to about 0.1.

18. The composition of Claim 1 wherein the 1,8-anthaquinone derivative has a ratio of extinction coefficient at 650 nm to the extinction coefficient at 600 nm of less than or equal to about 0.1.

19. The composition of Claim 1, wherein the 1,8-anthaquinone derivative has a maximum absorption located between about 540 nm and about 600 nm as measured in methylene chloride solution.

20. The composition of Claim 19, wherein the maximum absorption is located between about 550 nm and about 590 nm as measured in methylene chloride solution.

21. The composition of Claim 1, wherein the 1,8-anthraquinone derivative gives a hue angle value of less than 335 degrees in polycarbonate composition (when used at a loading of 0.01 pph at a part thickness of 3.2 mm).

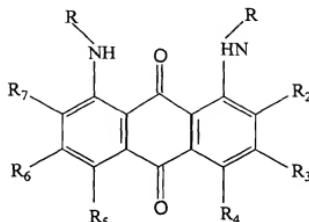
22. The composition of Claim 21, wherein the hue angle is less than or equal to about 330 degrees.

23. The composition of Claim 22, wherein the hue angle of less than or equal to about 320 degrees.

24. A colored polymeric resin composition, comprising:

a polymeric resin; and

a 1,8-anthraquinone derivative having a Formula (VIII):



(VIII)

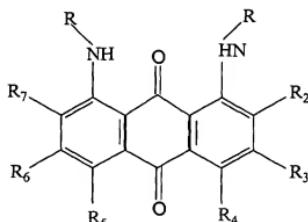
wherein R₂ - R₇ are, individually, selected from the group consisting of a hydrogen atom, a hydroxyl group, an alkoxy group, an aryloxy group, an aliphatic group, an aromatic group, a heterocyclic group, a halogen atom, a cyano group, a nitro group, --COR₉, --COOR₉, --NR₉R₁₀, --NR₁₀COR₁₁, --NR₁₀SO₂R₁₁, --CONR₉R₁₀, --CONHSO₂R₁₁, and --SO₂NHCOR₁₁; in which R₉ and R₁₀ are, individually, selected from the group consisting of a hydrogen atom, an aliphatic group, an aromatic group, and a heterocyclic group; wherein R₁₁ is selected from the group consisting of an aliphatic group, an aromatic group, and a heterocyclic group; and wherein R is selected from the group consisting of hydrogen, an alkyl group containing 1 to 20 carbon atoms, a cycloalkyl group containing 3 to 20 carbon atoms, an allyl group containing 3 to 20 carbon atoms, a hydroxyl group, a 5- membered heterocyclic ring, and a 6- membered heterocyclic ring;

wherein an article formed from the composition has a hue angle value of less than or equal to about 330 degrees (when used at a loading of 0.01 pph at an article thickness of 3.2 mm).

25. The composition of Claim 24, wherein the hue angle is less than or equal to about 320 degrees.

26. The composition of Claim 21 wherein said polymeric resin is a polycarbonate resin
27. The composition of Claim 26 wherein the polycarbonate resin has a weight average molecular weight (Mw) of less than or equal to about 20,000.
28. An article formed from the composition of Claim 1.
29. An article formed from the composition of Claim 21.
30. An article formed from the composition of Claim 24.
31. An article formed from the composition of Claim 27.

32. A method of making a colored polymeric article, comprising:
 forming a composition of a polymeric resin and a 1,8-anthraquinone derivative having a Formula (VIII):



(VIII)

wherein R₂ - R₇ are, individually, selected from the group consisting of a hydrogen atom, a hydroxyl group, an alkoxy group, an aryloxy group, an aliphatic group, an aromatic group, a heterocyclic group, a halogen atom, a cyano group, a nitro group, --COR₉, --COOR₉, --NR₉R₁₀, --NR₁₀COR₁₁, --NR₁₀SO₂R₁₁, --CONR₉R₁₀, --CONHSO₂R₁₁, and --SO₂NHCOR₁₁; in which R₉ and R₁₀ are, individually, selected from the group consisting of a hydrogen atom, an aliphatic group, an aromatic group, and a heterocyclic group; wherein R₁₁ is selected from the group consisting of an aliphatic group, an aromatic group, and a heterocyclic group; and wherein R is selected from the group consisting of hydrogen, an alkyl group containing 1 to 20 carbon atoms, a cycloalkyl group containing 3 to 20 carbon atoms, an allyl group containing 3 to 20 carbon atoms, a hydroxyl group, a 5- membered heterocyclic ring, and a 6- membered heterocyclic ring;

wherein the 1,8-anthraquinone derivative gives a hue angle value of less than or equal to about 330 degrees (when used at a loading of 0.01 pph at an article thickness of 3.2 mm); and

forming the composition into the article.

33. The method of Claim 32, wherein the 1,8-anthraquinone derivative is present in an amount of less than or equal to about 80 wt% based upon the total weight of the composition.

34. The method of Claim 32, further comprising forming the composition insitu during the forming of the article.

35. The method of Claim 34, wherein the forming of the composition insitu further comprises using at least one of a masterbatch, single colorant dispersion, and a liquid dying process.

36. The method of Claim 32, wherein the polymeric resin is formed into colored pellets prior to being introduced to the mold.